UNIVERSAL ATSC DIGITAL TV RECEIER MODULE

User's Manual

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NOTE:

This user's manual is only for reference.

Modifying rights are reserved.

Specifications are subject to change without notice.

SAFETY INFORMATION

Always be careful when using your product. To reduce the risk of fire, electrical shocks, and other injuries, keep these safety precautions in mind when installing, using, and maintaining your machine.

- Be sure to read this user's manual before starting your operation.
- Never open the cover. It is very dangerous to touch the inside of the unit due to possible electric shock.
- Place the unit in a well ventilated and no heat environment.
- Install the unit horizontally. Unbalanced installation may cause the unit to be damaged.
- When the unit is suddenly moved to a hot area from a cold area, it may cause problems. In that case, turn off the power, and turn on after 1-2 hours.
- Install the unit in a place with: good ventilation, suitable temperature, no direct sunrays, low humidity, and low vibration influence.
- Do not put heavy objects on the unit.

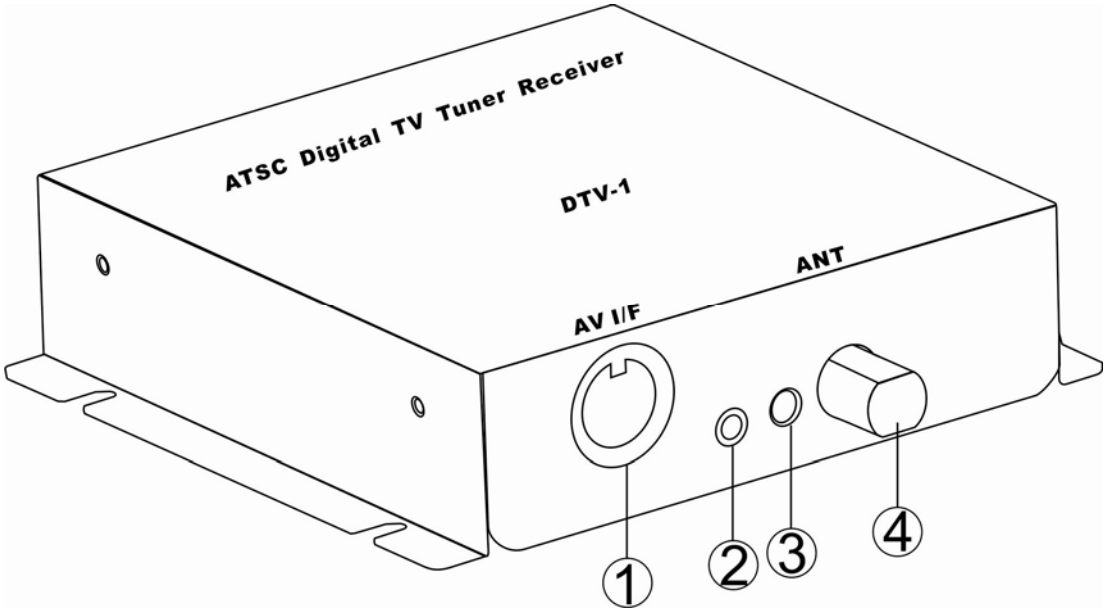
FEATURES

Receiving full bank frequency rang: 57MHz-803MHz (center frequency)
Compliant with ATSC A/52 and QAM ITU-T J.83 ANNEX B 64/256QAM
Use high performance ATSC /QAM demodulator
Support OSD language options: English, Spanish, French
Electronic program guide (EPG) and on screen channel information
Program channel list
Favorite channel list
Closed caption supported (CCD)
Video aspect ratio: 4:3/16:9
SDTV 720*480P or 480i video output
2 channel stereo audio output
Antenna Jack: female F type,

SPECFICATIONS

RF input frequency	57MHz-803 MHz full band
Input impedance	Input impedance
Channel bandwidth	6MHZ
Demodulator standard	ATSC A/52 and QAM ITU-T J.83 ANNEX B 64/256 QAM
Video decoder standard	ISO/IEC 13818-1 MEPG-2 MP@HL
Video system	NTSC
Video output	10 Bit DAC Composite video 1.0 +/_ 0.2Vp-p
Audio output	2.0 Vp-p Stereo
Audio language	English, Spanish, French
Power supply	DC input +10.8V-16V +/- 10% 0.5A
Power consumption	3W max
Dimension	99 (L)* 110 (W)* 26 (H)mm
Weight	KG

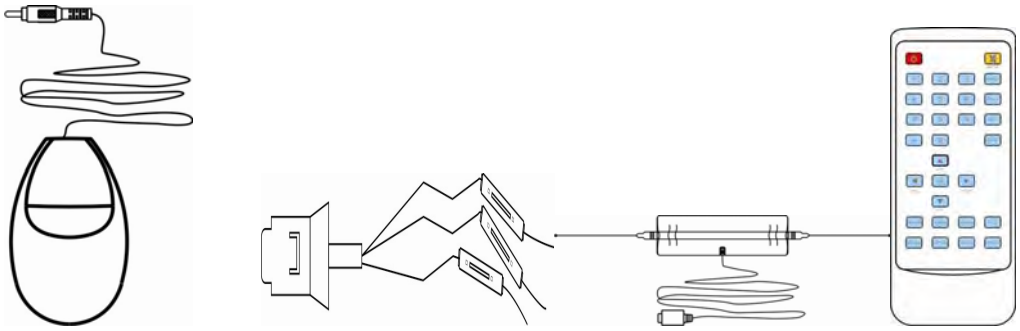
UNIT



1. AV I/F 2. Remote Eye 3. Power LED 4. Anttnea

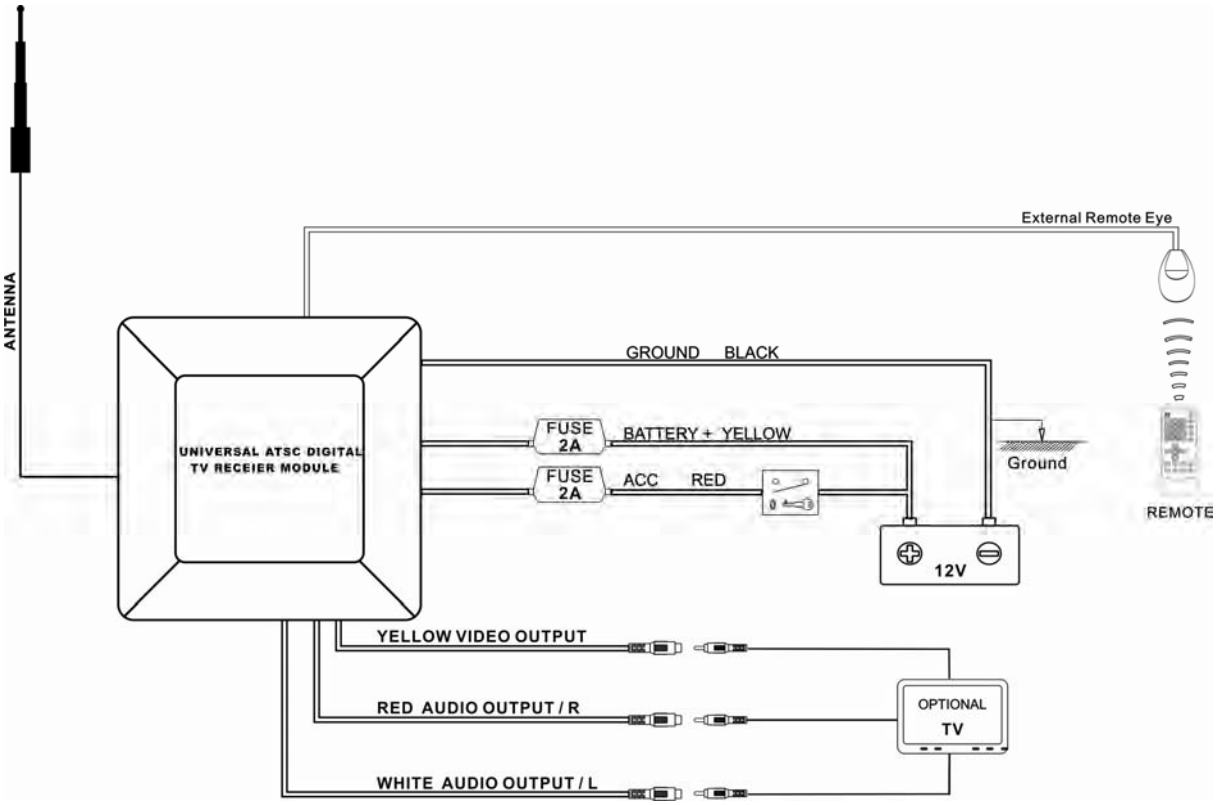
ACCESSORIES

1 2 3 4

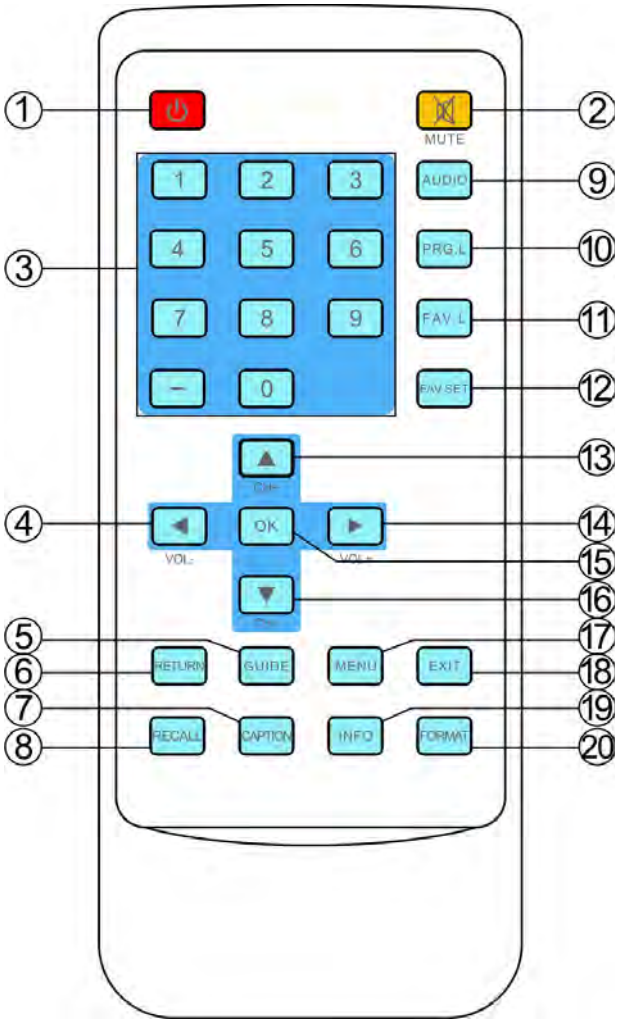


Bolt x 1 Back Strap x 1 M5X5 Screws x 4 Keys x 2

WIRE CONNECTION



REMOTE CONTROL



1. POWER
2. MUTE
3. NUMBER BUTTONS
4. LEFT / VOL-
5. GUIDE
6. RETURN
7. CAPTION
8. RECALL
9. AUDIO
10. PRG.L
11. FAV.L
12. FAV.SET
13. CH+ / UP
14. RIGHT / VOL+
15. OK
16. CH- / DOWN
17. MENU
18. EXIT
19. INFO
20. FORMAT

1. POWER
Press to turn on / off the unit.
2. MUTE
Press to switch off the sound; press it again to resume to the previous volume level.
3. NUMBER BUTTONS
Press to input the channel number.
4. LEFT / VOL- / **14.** RIGHT / VOL+
When Main Menu is not on screen, press to adjust TV volume.
When Main Menu is on screen, execute the selected item in the menu, or confirm the desired value in input mode.
5. GUIDE
Press to display the on-screen Electronic Program Guide (EPG).
6. RETURN
Press to return to previous menu page.
7. CAPTION
Press to turn CAPTION on or off.
8. RECALL
Return to previous program.
9. AUDIO
Press to change the current audio language.
10. PRG.L
Press to display the all channels list.
11. FAV.L
Press to display the favorite channel list for setting.
12. FAV.SET
Press to switch up/down current channel set in favorite channel list.
13. CH+ / UP / **16.** CH- / DOWN
When Main Menu is not on screen, press to select channel.
When Main Menu is on screen, press to move cursor up/down.
15. OK
Press to confirm the selection.
17. MENU
Press to display the Main Menu on the screen.
18. EXIT
Press to exit the menu directly.
19. INFO
Press to show information of the current channel.
20. FORMAT
Press to switch the screen size between NORMAL – 16:9 – 4:3.

MENU OPERATIONS

Press **MENU** key to display the main menu.
It consists of six items as following:

- **Auto Search**
- **CH Setup**
- **CC Setup**
- **EAS Setup**
- **Parental Control**
- **System Setup**

Figure 1

Use **UP/DOWN** keys to move up and down from one item to another , and press **RIGHT** key to display corresponding sub-menu.

Example:
In the Main menu, use **UP/DOWN** keys to select Auto Search item, and press **RIGHT** key to enter into Auto Search menu.

Figure 2

NOTE:
*In any page of the menu, you can use **RETURN** key to return to previous menu page; or use **MENU** key switch to Main Menu page and then use **MENU** key again to exit Main Menu; or use **EXIT** key to exit Main Menu directly.*

1. Auto Search

We suggest searching the TV program by using the auto search function in Auto Search menu for first use.

1> Use **UP/DOWN** keys to select Auto Search item in Main menu, you will see the menu as **Figure 2.**

2> Press **RIGHT** key to enter the Auto Searching window (**Figure 3**). System will search channels automatically.

Figure 3

After searching, the searched channels will be added to channel list and system will turn to full-screen mode to view first searched program automatically.

During the searching, you can press **LEFT** key to stop. When auto searching is completed or stopped**,** you will see the information as **Figure 4**

Also, you can press **EXIT** key to exit auto searching mode.

Figure 4

2. CH Setup

In Main menu, select CH Setup item and press **RIGHT** key to enter into Channel Setup menu (**Figure 5**).

Figure 5

·Skip / unskip a channel

If you want to skip a channel, you should use this menu and do the following two steps:

1> Use **UP/DOWN** key to select Channel item, then press **RIGHT** key to select the channel backward or forward that you want to skip.

2> Use **UP/DOWN** key to select the Skip item in Channel Setup menu and press **RIGHT** key to skip current selected channel or not.

Favorite list

In the Remote control unit, you can press **FAV** key to set your favorite channels.

1> Press **FAV.L** key to enter into Favorite List (**Figure 6**).
2> You can set maximum five favorite channels, use **UP/DOWN** key to moving up/down the highlight item, use **RIGHT** to select the particular channel.

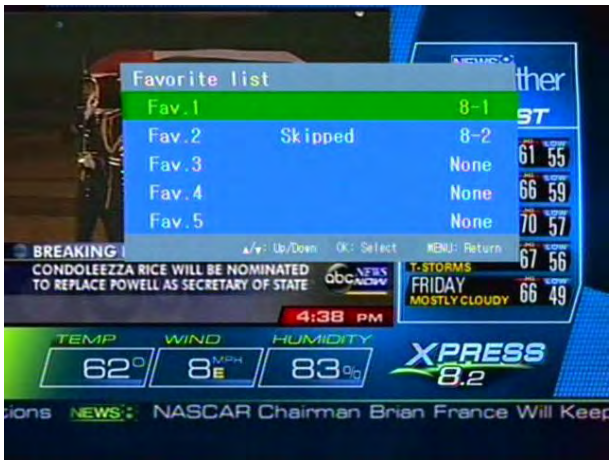


Figure 6

After you set the favorite channel list and exit the favorite list window, you can press **RDM** key to jump into favorite channel and change current channel up or down set in favorite list.

3. CC Setup

In Main menu, select CC Setup item and press **RIGHT** key to enter into Closed Captioning Setup. (CC608/CC708).

1> Use **UP/DOWN** key to select CC Setup item in main menu ,and press **RIGHT** key to enter into CC Setup menu (**Figure7**).

2> Use **UP/DOWN** key to select a sub item, and press **RIGHT** key to change current item setting.

Figure 7

If you don't want to display the CC when viewing the program , you can set CC Display Off.

If you don't want to change the CC style of current program, you can set CC Mode to Broadcast mode as **Figure 7**. When CC Mode is Broadcast, CC Customer is grayed-out and cannot be edited.

The default value about CC setup menu is following:

CC Display: On;
608CC Type: C1;
708CC Type: Service 1;
CC Mode: Broadcast;

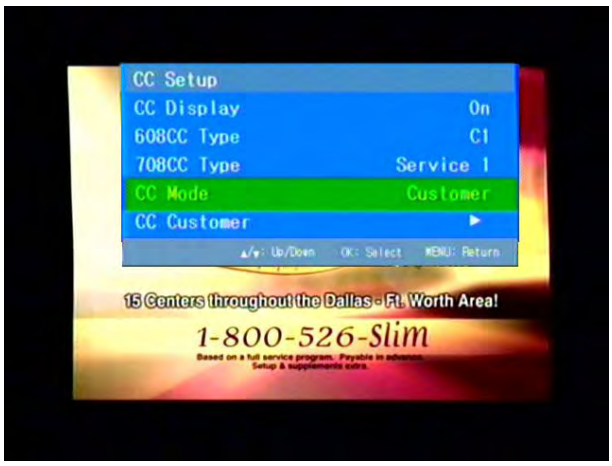


Figure 8

You can set CC style as you like as following:

1> Use **UP/DOWN** key to select CC Mode item in CC Setup menu(**Figure 8**) and press **RIGHT** key to set CC Mode to Customer;

2> Use **UP/DOWN** key to select CC Customer item in CC Setup menu (**Figure 8**), then press **RIGHT** key to enter into CC Customer sub menu (**Figure 9**)

3> In CC Customer menu, you can use **UP/DOWN** key to select sub item and use **RIGHT** key to change setting.

Figure 9

Some important things about 608CC/708CC

1> If you set CC Display On, and the program has CC608 and CC708 at the same time, CC 708 display is higher priority than the CC608 display.
2> If you have not set the 608CC and 708CC type to proper setting, the CC will not be displayed even the current program contains CC information.
3> You can't change CC608 style, such as font, color, or others.

CC Option List

Item	Option	Default
CC Size	Small, Standard, Large	Standard
CC Font	Font0, Font1, Font2, Font3, Font4, Font5, Font6, Font7	Font1
CC Opacity	Solid, Trnsl, and Trnsp	Solid
CC color	Black, White, Red, Green, Blue, Yellow, Magenta, and Cyan	White
Font Edge color	Black, Gray, Red , Green , Blue , Yellow , Navy and Dark Gray	Black
Font Edge type	None, Raised, Depressed, Outline, L.Shadow and R.Shadow	None
Background color	Black, Gray, Dark Gray, Red, Navy, Green, Blue and Yellow	Black
Background opacity	Solid, Transparent	Solid

4. EAS Setup

The system can display EAS (**Emergency Alert System**) message broadcast pursuant to 47CFR11.117 of the FCC Rules.

1> In main menu(**Figure 1),** use **UP/DOWN** key to select EAS Setup item and press **RIGHT** key to enter into EAS Setup menu.
2> Use **UP/DOWN** key to select EAS level and change the current setting.

There are three setting: Always, Skip low priority and Skip low/medium priority. The default setting is Always.

Figure 10

5. Parental Control

Before entering Parental Control menu, you need to input password in order to prohibit from the child to change any settings on the Parental Control.

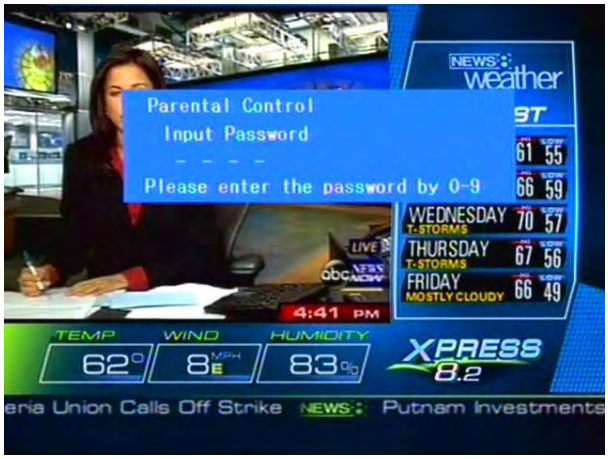


Figure 11

How to enter into Parental Control menu

1> In main menu(**Figure 1),** use **UP/DOWN** key to select Parental Control item and press **RIGHT** key to enter into Parental Control password input page(**Figure 11)**.

2> Input the password by pressing digital number key (default password is : **0000).** If password is invalid, input numbers are cleared and you need to input password again; when password is valid, Parental Control menu will be displayed automatically (**Figure 12)**.

About Parental Control menu

1> Enter into Parental Control menu (**Figure 12**) ;

2> Use **UP/DOWN** key to select sub item and use **RIGHT** key to enter into sub menu or change current item setting.

Figure 12

This menu you can set as following:

·V-chip Setting;

·RRT Setting;

·Block Enable;

·Unrated;

·Change Password;

·V-chip setting

1> Select V-chip Setting item in Parental Control menu(**Figure 12**) and press **RIGHT** key to enter into V-chip setting menu(**Figure 13**).

2> Use **UP/DOWN** key to select sub item and press **RIGHT** key to enter into sub menu.

Figure 13

V-chip Rating includes the following rating level:

·Movie rating

·USA TV Content rating

·Canada English rating

·Canada French rating

Example:

How to set Movie ratings;

1> Select Movie ratings item in V-chip Setting menu(**Figure 13**) and press **OK** key to enter into Movie ratings menu(**Figure 14**);

2> Press **UP/DOWN** key to select sub item;

3> Press **ENTER** key to set view or block, default setting is view;

☐ - VIEW

☑ - BLOCK

Figure 14

Instruction:

1> Blocking one rating will affect all the higher ratings. For example, blocking “R”, and the above rating “NC-17” and “X” will automatically block, no matter the previous state of these ratings was. If a password is defined while a TV program rating is received from the current channel, then sound will be muted and the following message is displayed on the center of screen. The rating information should be consistent with current program rating.

2> Using the same way to set **USA TV Content** / **Canada English** / **Canada French** ratings.

Figure 15

·**Change Password**

1> Select Change Password item in Parental Control menu (**Figure 12**) and press **RIGHT** key to enter into Change Password menu (**Figure 16**).

2> Input the new password , after that, the system will require you to confirm the new password as **Figure 17**

3> Confirmed the password, if success, you will get the message as **Figure 18**

Figure 16

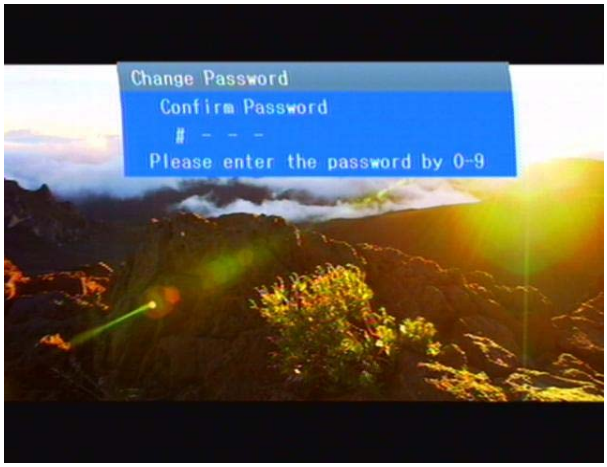


Figure 17

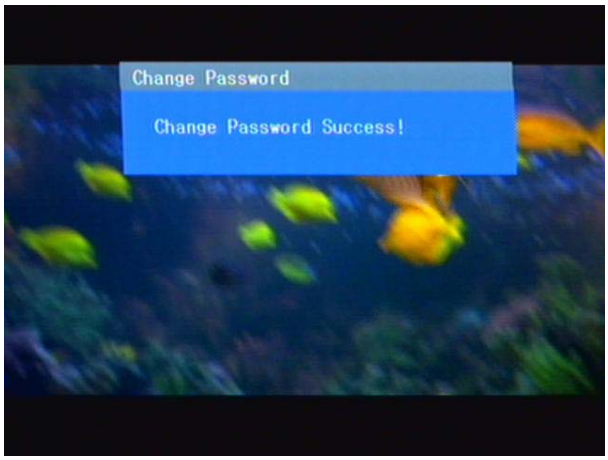


Figure 18

Note: If you want to disable parental control blocking function, you can set "Block Enable" item to "off", or if you want to disable this function completely, you could set "Unrated" item to "off".

6. System Setup

In main menu, select System Setup item and press **RIGHT** key to enter into System Setup menu (**Figure 19**). Press **UP/DOWN** to select item and **RIGHT** key to enter into sub menu or change current item setting.

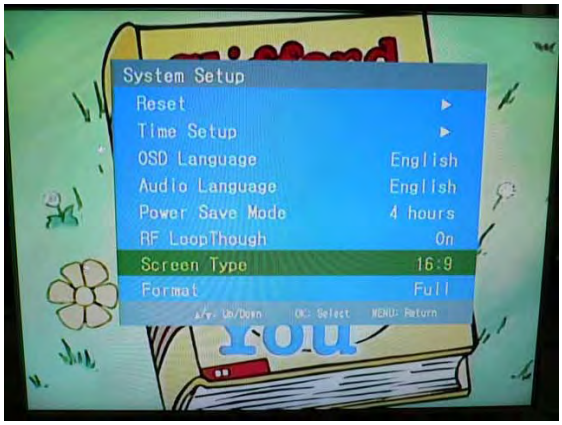


Figure 19

1> **Reset:** Restore system setting parameter to default setting if you press **RIGHT** key when this item is highlighted.
2> **Time Setup:** Enter into a menu for time setup
3> **OSD Language:** Set OSD language to English, Spanish or French, default is English.
4> **Audio Language:** Set audio language to English, Spanish or French, default is English.
5> **RF Output:** Select the loop though or Ch3/4 RF output.
6> **Screen Type:** Set display screen type, default is 4:3.
7> **Format:** Zoom in or zoom out the picture.

About Time Setup

1> Enter to System menu;
2> Use **UP/DOWN** key to select Time Setup item and press **RIGHT** key to enter into Time Setup menu(**Figure 20)**;
3> Press **UP/DOWN** key to select different item and press **RIGHT** key to change setting.

Figure 20

Instruction:

1> The Clock item displays the current time from programs and you can't change it.
2> The time zone item can set to Eastern, Samoa, Hawaii, Alaska, Pacific, Mountain, Central, Atlantic, Newfoundland, the default is Samoa;
3> The Daylight saving switch, and default value is off.

SPECIAL FEATURES

1. Channels List

1> Press **PRG.L** key when TV is showing no menu, the channels list will be displayed (**Figure 21)**, you can get the information about channel number, channel name, skip status of all channels.

2> Press **UP/DOWN** key to select item and Press **RIGHT** key to switch current channel to your selected channel.

Figure 21

2. Electronic Program Guide

1> Press **FAV.SET** key to open the EPG window, it displays the first page of program scheduler;

2> Press **RIGHT** key to switch the next page in program scheduler.

3> Press **LEFT** key to switch the previous page in program scheduler.

F

Figure 22

3. Channel information

Press **INFO** key to get the information of current channel. All the information is following:

[1] Channel number: current channel number.

[2] Channel name: current channel name.

[3] Picture size: current picture

[4] System time: current time of day information.

[5] Program name: current program name.

[6] Program time: time duration of current program.

[7] Audio language: current language in the program

[8] CC&CS: current status of CC

[9] V-chip Info: current program V-chip information.

Figure 23

4. Audio Language

Press **AUDIO** key to set audio language of the current program.

If the program contains several audio languages, you can switch the audio language between these languages by pressing **AUDIO** key. The system can display the full language name of English, Spanish, French, German, Italian, Japanese, Chinese, Korean, but others just only use the front three letters of language name instead of the full name.

Figure 24

Set default audio language:

You can set the default audio language in menu:

1> Press **MENU** key to enter into main menu;
2> Select System Setup item and press **RIGHT** key to enter into System Setup menu;
3> Use **UP/DOWN** key to select Audio Language item and press **RIGHT** key to change setting.

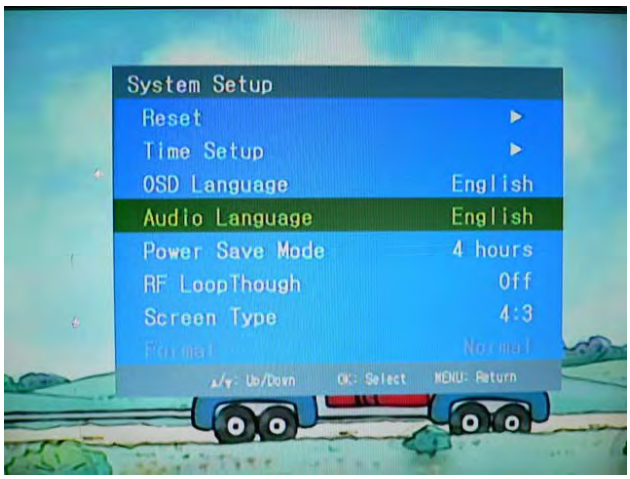


Figure 25